

Faculty of Science Course Syllabus (Section A)
Department of Psychology and Neuroscience
PSYO/NESC 4901.03/4902.03
HONOURS THESIS
Fall & Winter 2023-2024

Dalhousie University acknowledges that we are in Mi'kma'ki, the ancestral and unceded territory of the Mi'kmaq People and pays respect to the Indigenous knowledges held by the Mi'kmaq People, and to the wisdom of their Elders past and present. The Mi'kmaq People signed Peace and Friendship Treaties with the Crown, and section 35 of the Constitution Act, 1982 recognizes and affirms Aboriginal and Treaty rights. We are all Treaty people.

Dalhousie University also acknowledges the histories, contributions, and legacies of African Nova Scotians, who have been here for over 400 years.

PROFESSORS:	Helene Deacon (Psychology)	Libby Myles (Neuroscience)
EMAIL:	helene.deacon@dal.ca	libby.myles@dal.ca
OFFICE:	LSC - Psychology 2335	
OFFICE HOURS:	<i>Fall:</i> W 1-3 & by app't <i>Winter:</i> To be announced	<i>Fall:</i> W 1:30-3:30 & by app't (Teams) <i>Winter:</i> To be announced

CLASSROOM SPACE

While this course will be delivered synchronously via Microsoft Teams, we have two rooms booked (one for PSYO/one for NESC, as found below) during class time for students to use. These rooms can be used for attending class and/or presenting if they need a quiet space on campus. Please bring headphones for your laptops as there could be other students in the shared classroom space.

- **PSYO:** Room 2266 in the Psychology wing of the LSC
- **NESC:** Room 4207 in the Psychology wing of the LSC (*room 2266 on Dec. 6th if needed as a class period*)

LECTURES

Fall - Monday 9:30 to 11:30 AM; Winter – Tuesday 9:30 to 11:30 AM. Classes are delivered synchronously online (Microsoft Teams). For the presentation days in the fall, only those presenting are required to attend. Others are welcome to join of course.

COURSE DESCRIPTION

Under a faculty member's supervision, each student conducts original research in neuroscience or psychology. Students meet as a class to describe their proposed research and progress. A formal written report of the completed research is required. The final grade is based on originality and skill with emphasis on the written and oral reports.

NOTES: This course must be taken in the same academic year as PSYO/NESC 4902.03 The work undertaken in PSYO/NESC 4902.03 should be a continuation of that initiated in PSYO/NESC 4901.03. **A grade of B- in 4901 is a pre-requisite to be able to take 4902.**

COURSE PREREQUISITES

Instructor permission required provided the student meets all requirements for Honours.

LEARNING OBJECTIVES

The purpose of this course is to familiarize students with conducting research in psychology/neuroscience. By the end of the course, students should have gained experience:

- critically reading, evaluating, and presenting original research and theoretical articles on their research topic in oral and written formats
- working closely with a Supervisor to ethically develop and conduct a research project on their chosen topic
- analyzing data relevant to their research project
- writing about their research project
- presenting on their research project

Please note that an Honours project consists of each of the following components, with some flexibility in how these are achieved, and as approved by the Honours Supervisor:

1. Within the field of Psychology or Neuroscience, presenting a **clearly articulated research question**, along with the **rationale** for it
2. **Producing data** – this can take different forms:
 - a. Collecting original data
 - b. Developing a new data collection protocol, with piloting to refine
 - c. Acquiring or deriving new data from an existing source (e.g., counting cells on slides, analyzing electrophysiological recordings or fMRI datasets, coding videos)*
 - d. Selecting articles for a formal systematic review (<https://www.ncbi.nlm.nih.gov/books/NBK555520/>)*
3. **Statistically analyzing data**, appreciating that sample sizes may sometimes be smaller than ideal

**For students who are producing data in categories c or d, we expect that the student will gain hands on experience in collecting data in some manner, even if this is for another project*

COURSE MATERIALS

Course materials can be found on Brightspace.

COURSE ASSESSMENT for 4901

COMPONENT	WEIGHT (% OF FINAL GRADE)
Description of Thesis Plan	15%
Proposal Presentation (<i>see schedule</i>)	25% (20 for presentation; 5 for peer questions)
Written Thesis Proposal	30%
Skill and Effort	30%
Total	100%

COURSE ASSESSMENT for 4902

COMPONENT	WEIGHT (% OF FINAL GRADE)
Final Presentation (<i>see schedule</i>)	40%
Written Thesis	40%
Skill and Effort	20%
Total	100%

Conversion of numerical grades to Final Letter Grades follows the Dalhousie Common Grade Scale

A+ (90-100)	B+ (77-79)	C+ (65-69)	D (50-54)
A (85-89)	B (73-76)	C (60-64)	F (<50)
A- (80-84)	B- (70-72)	C- (55-59)	

Faculty of Science regulations require that Honours students receive a grade based on an Honours Qualifying Examination. In the Department of Psychology and Neuroscience, this is not an examination in the common sense. Instead, the grade, a Pass or Fail, is assigned by the Course Instructor. A Pass is taken as a grade of C or above in both 4901 and 4902; University guidelines specify that an overall grade of C must be attained in each course in the students Honours program for an Honours degree to be granted (see Undergraduate Calendar, Honours Programs). **However, please note that Honours students in Psychology and Neuroscience must also earn a B- or higher in 4901 to continue in 4902.**

COURSE POLICIES

Information will be posted on Brightspace including announcements and any changes to the schedule. Students will use Brightspace to submit electronic copies of their thesis plan, proposal presentations, written proposals, final theses, final presentation, and SDAs. The electronic copies may be submitted for verification using third-party originality checking software. **Electronic copies of proposals and theses must be submitted in both .doc and .pdf formats with the required naming format (see pages 6 and 7).**

Missed or Late Academic Requirements due to Student Absence:

All decisions on missed or late academic requirements are made by the instructors for the course, not the Honours Supervisor. For any missed presentations in the fall, students will be rescheduled (as needed) to Nov. 27th and/or Dec. 6th.

Short-term illnesses or medical issues, or personal issues are ones that require students to miss 3 or fewer school days because of debilitating distress or illness. Short-term illnesses/personal issues include such things as the flu, illness/death of a distant relative, etc. For short-term illnesses or medical issues, or personal issues, a STUDENT DECLARATION OF ABSENCE must be submitted via Brightspace. Only one academic requirement may be missed as a result of short-term illness/issue in each semester (i.e., one for each of 4901 and 4902) and in this course, an SDA may be used for the submission of the proposal or final thesis.

Long-term illnesses or medical issues, or personal issues may require a student to miss more than 3 consecutive days of school. These include major acute illnesses; ongoing, chronic illnesses that intermittently affect a student; surgery; illness/death of a close relative, and/or significant injury. For these concerns or for students with more than one SDA per semester should consult Patricia Laws, Assistant Dean (Student Affairs). There are no limits to the number of course components that may be late for long-term illnesses or personal issues, with appropriate documentation.

For all cases of missed or late components (both short and long term), students must contact an Instructor prior to the academic requirement deadline or scheduled presentation time. Make-up and/or prorating options will be developed on a case-by-case basis depending on the course component missed and the nature and extent of students' difficulties.

Penalties for Unexcused Missed or Late Academic Requirements:

Students will receive zero for an *unexcused* missed proposal or final presentation. For the thesis description, thesis proposal, and thesis itself, penalties will accrue beginning on the due date (including weekends) in the amount of 1 percent of the total course grade for the written proposal and 2 percent of the total course grade for the final thesis for each day late.

Notes on Online/Blended Course Delivery:

- Students need a laptop with a microphone and camera, as well as the appropriate software to access Microsoft Teams.
- Should students encounter technology issues during presentations, we will try again at the end of that class. If this is not successful or time does not permit, backup days will be used as needed (see below).
- Any students connecting to online resources from outside Canada are responsible for ensuring awareness and compliance with any applicable laws in the country from which they are connecting.

COURSE SCHEDULE

Fall Term (PSYO/NESC 4901) – Lectures will be synchronous and be held during the class time. Slides from lectures will also be posted to Brightspace. For proposal presentations, students will choose a presentation time on Brightspace.

Date	Topic	Leader
Sept 11	Course Introduction and Review of syllabus Timeline for the Term Thesis Plan Description	Myles Deacon Myles
Sept 18	Library Resources for Research Applying to Graduate School Options in Clinical Psychology	Marcoux (Uni Librarian) Adamo Rosen
Sept 25	Outlining and Writing Your Written Proposal and Proposal Rubric* Preparing Your Talk & Proposal Presentation Rubric Two readings for today: “Write it Up” + “Writing Workshop”	Deacon Myles
Oct 2	<i>Truth & Reconciliation Day – NO CLASS</i> THESIS PLAN DUE	
Oct 9	<i>Thanksgiving – NO CLASS</i>	
Oct 16	Thesis Plan Feedback Refresher on Outlining and Writing Your Written Proposal	Myles Deacon
Oct 23	THESIS PROPOSAL PRESENTATION – GROUP#1 (PSYO or NESC)	
Oct 30	THESIS PROPOSAL PRESENTATION – GROUP#2 (PSYO or NESC)	
Nov 6	THESIS PROPOSAL PRESENTATION – GROUP#3 (PSYO or NESC)	
Nov 13	<i>Remembrance Day – NO CLASS</i>	
Nov 20	THESIS PROPOSAL PRESENTATION – GROUP#4 (PSYO or NESC)	
Nov 27	THESIS PROPOSAL PRESENTATION – GROUP#5 (PSYO only) <i>Backup proposal presentation day for PSYO or NESC as needed</i>	
Dec 4	<i>NO CLASS</i> WRITTEN THESIS PROPOSAL DUE BY 4 PM ATLANTIC TIME**	
Dec 5 (<i>Makeup for Truth & Reconciliation Day</i>)	<i>NO CLASS</i>	
Dec 6 th (<i>Makeup for Thanksgiving</i>)	<i>Backup proposal presentation day for PSYO or NESC as needed</i>	

*Read “Write it Up”, Chapter 4 – Brightspace; *Read “Writing Workshop”, Chapter 3 – also in Brightspace

**Two versions must be submitted via Brightspace (one .pdf & one .doc(x); versions MUST match each other).

Please name your file using the following format: **LastName_FirstName_Thesis_Proposal (e.g.,**

Smith_Helen_Thesis_Proposal.doc).

Winter Term (PSYO/NESC 4902) – A few lectures related to writing the Results and Discussion sections of your thesis, as well as putting together your final presentation, will be presented. There will be a poster or oral talk session(s) at the end to present your results.

WE HAVE A FEW SCHEDULED CLASSES IN THE WINTER TERM AND RESERVE THE RIGHT TO ADD MORE (WITH NOTICE).

Jan 23	Managing Your Manager / Winter Term Update <i>Deadline for final data collection. You need time to write your thesis.</i>	Myles
Mar 5	Preparing your Written Thesis*	Deacon
Mar 12	Preparing your Final Presentation	Myles
Apr 5	COMPLETED THESIS DUE BY 4PM ATLANTIC TIME**	
TBD	FINAL PRESENTATION SESSION***	

*Read “Write it Up”, Chapter 7 – Brightspace

**Two versions must be submitted via Brightspace (one .pdf & one .doc(x); versions MUST match each other).

Please name your file using the following format: **LastName_FirstName_Thesis (e.g.,**

Smith_Helen_Thesis.doc).

***More details to follow

ADDITIONAL COURSE INFORMATION

Introduction

The Honours thesis is an original piece of empirical research designed and conducted by a student under the supervision of a member of the Department of Psychology and Neuroscience or by someone approved by that department. By now you should have an approved Supervisor and have submitted the Supervisor/Student Contract. It is the responsibility of the research Supervisor to provide or arrange any and all financing that is needed for the project (except for your final presentation; more information about this will be available in the winter term), as well as provide guidance with all aspects of the project, including statistical analysis.

Evaluation

The grade for 4901/4902 is based on your performance in the design, execution, and presentation of the Honours thesis. A written thesis proposal and the written thesis itself are the major parts of your grade. The proposal and thesis are evaluated by your Supervisor on three criteria: (a) the scientific merit of the research (the theoretical significance of the project, the adequacy of the design, the execution of the research, and the quality of the analysis and evaluation of the results), (b) the conformity of the written document to standard style, and (c) the quality of the writing.

The major events in the first term are an oral presentation of the proposal to the class and submission of the written version of the proposal. Only a few formal classes are scheduled for the second term to provide information on the latter parts of your thesis and your final presentations.

Finally, a presentation of the Honours projects will occur at the end of the winter term. Proposal and final presentations are common at scientific and public conferences and they provide opportunities to showcase research as well as discuss them with interested individuals. Two graders (at least one of whom will be an instructor) will evaluate the presentations.

The method of evaluation is summarized below:

1. Thesis Plan (PSYO/NESC 4901)

Please prepare a written plan (max. 500 words) of your project describing the research question and rationale for it, methods, and analytic plan. Details for this will be provided in the first class.

2. Proposal Presentation (PSYO/NESC 4901)

Strive for clarity and brevity in both your speech and on your slides. If you can, we suggest that you rehearse the talk with your Supervisor (and/or lab), and also with friends who can tell you if you are assuming too much of your audience. You will choose a date in early September for this talk via Brightspace. Presentations will be in groups of NESC or PSYO students but remember that most of your fellow students will not be familiar with the kind of work that you are doing, so work on making things accessible to your audience.

Talks should be **10 minutes (MAXIMUM)** followed by approximately 3 minutes for questions. You will be required to upload a pdf version of your presentation to Brightspace so that your Honours course Advisors can mark it (**24 hr prior to your scheduled presentation time**). Rework your talk until it fits within the allotted time and is clear to listeners who are hearing it for the first time. Use this same approach again for your final presentation in the spring. Each student presenting on a given day will need to ask two questions of two other speakers. Asking these two questions of two other speakers will be part of your presentation mark.

3. Written Thesis Proposals (PSYO/NESC 4901)

As you prepare to describe your proposal to the class, you will also be working on its written version. Two electronic copies must be submitted via Brightspace (one .pdf and one .doc(x); versions MUST match each other). Please name your file using the following format: **LastName_FirstName_Thesis_Proposal (e.g., Smith_Helen_Thesis_Proposal.doc)**.

Your Supervisor will be working with you on drafts of your proposal and of your thesis well before the due dates. You and your Supervisor will arrive at a method of working together that will depend both on your needs and the Supervisor's style, but, certainly, drafts of the proposal and thesis should be in the hands of your Supervisor in plenty of time for a minimum of one revision before final submission.

Because of the diversity in research topics, extent of prior research in the area, methodology, and appropriate analyses, it is impossible to put page/word limits on **specific** sections of your thesis or proposal. You simply need to tell the reader what they need to know as succinctly as you can and your Supervisor should provide guidance.

However, the limit for the abstract for your proposal and final thesis will be 250 words.

You will also have a limit of 25 pages for the main text portion (excluding title page, abstract, appendices, tables, figures, and references) of your final thesis, so the proposal main text should not be longer than this.

The Honours thesis is meaningful research done under time limits that make meaningful research difficult. Former students tell us that they have devoted from two to six times as much time to their Honours research as they have to other, conventional, classes. You should set a work schedule with your Supervisor early in the course. It is not only the predictable time your work will take you that you and your Supervisor should discuss at an early stage of planning. Delays can occur as you seek ethical approval for an investigation. Participants may be difficult to recruit — particularly if you need participants with uncommon characteristics. An experimental technique may fail to work. Supervisors cannot guarantee that you'll escape such problems, and we encourage you to discuss a possible substitute project early. The consequences of failing to complete your thesis by the April deadline are described below under "written thesis."

Feedback on your proposal will be available electronically. Your Supervisor will have written comments both critical and laudatory. Note that if there are helpful annotations on these copies, you will want to use them in preparation for the thesis. These copies are referred to in the spring when the thesis is submitted, so it's important that you pay attention to them (***and should there be paper copies, these would need to be returned to us in the spring when you submit the thesis***). In that way, your Supervisor will be able to see how you responded to their comments on the proposal.

The Supervisor is your primary guide to content and style. The Publication Manual of the American Psychological Association sets the standard style for most psychological publications. Your Supervisor should determine whether you should use this or another style, particularly for those in Neuroscience.

4. Written Thesis (PSYO/NESC 4902)

Two versions must be submitted via Brightspace (one .pdf and one .doc(x); versions must match each other). Please name your file with the following format: **LastName_FirstName_Thesis (e.g., Smith_Helen_Thesis.doc)**.

Please again note the **250-word** word limit for your final abstract and **25-page** page limit for the main text portion (excluding title page, abstract, appendices, tables, figures, and references) of your final thesis. **We cannot guarantee that late submissions of the written thesis will be graded in time for you to graduate in May/June.** Marked copies of your final thesis and/or feedback will be made available via Brightspace.

5. Final Presentations (PSYO/NESC 4902)

The final event of PSYO/NESC 4902 is a presentation. The date for this presentation will be released in the winter term. **This will be either an oral presentation or a poster.** You will be required to upload a pdf version of your presentation to Brightspace so that your Honours course Advisors can mark it (**24 hr prior to the scheduled presentation time**).

6. Skill & Effort (PSYO/NESC 4901 and 4902)

Your thesis Supervisor will provide a substantial portion of your mark based on the work that you did on your thesis research. Separate grades will be given for 4901 and 4902. This can include (but is not limited to) your participation in ethics preparation, research design, stimuli creation and data collection and analyses, your ability to meet deadlines, the quality of your written and oral work, as well as your response to feedback on drafts and presentations.

We strongly encourage all students to discuss with their Supervisor expectations for their Honours work for the term, so that expectations are clear. This might include, for instance, a timeline for ethics preparation, research design, piloting and data collection—effectively any of the components that can be included in the skill and effort grade.

Faculty of Science University Policies and Statements (Section B)
Department of Psychology and Neuroscience
PSYO/NESC 4901.03/4902.03
HONOURS THESIS
Fall & Winter 2023-2024

Recognition of Mi'kmaq Territory:

Dalhousie University would like to acknowledge that the University is on Traditional Mi'kmaq Territory. The Elders in Residence program provides students with access to First Nations elders for guidance, counsel, and support. Visit or e-mail the Indigenous Student Centre at 1321 Edward St. or elders@dal.ca. Additional information regarding the Indigenous Student Centre can be found at: https://www.dal.ca/campus_life/communities/indigenous.html

Internationalization:

At Dalhousie, 'thinking and acting globally' enhances the quality and impact of education, supporting learning that is "interdisciplinary, cross-cultural, global in reach, and orientated toward solving problems that extend across national borders." Additional internationalization information can be found at: <https://www.dal.ca/about-dal/internationalization.html>

Academic Integrity:

At Dalhousie University, we are guided in all our work by the values of academic integrity: honesty, trust, fairness, responsibility, and respect. As a student, you are required to demonstrate these values in all the work you do. The University provides policies and procedures that every member of the university community is required to follow to ensure academic integrity. Additional academic integrity information can be found at: https://www.dal.ca/dept/university_secretariat/academic-integrity.html

Accessibility:

The Student Accessibility Centre is Dalhousie's centre of expertise for matters related to student accessibility and accommodation. If there are aspects of the design, instruction, and/or experiences within this course (online or in-person) that result in barriers to your inclusion, please contact the Student Accessibility Centre (https://www.dal.ca/campus_life/academic-support/accessibility.html) for all courses offered by Dalhousie with the exception of Truro. For courses offered by the Faculty of Agriculture, please contact the Student Success Centre in Truro (<https://www.dal.ca/about-dal/agricultural-campus/student-success-centre.html>).

Conduct in the Classroom – Culture of Respect:

Substantial and constructive dialogue on challenging issues is an important part of academic inquiry and exchange. It requires willingness to listen and tolerance of opposing points of view. Consideration of individual differences and alternative viewpoints is required of all class members, towards each other, towards instructors, and towards guest speakers. While expressions of differing perspectives are welcome and encouraged, the words and language used should remain within acceptable bounds of civility and respect.

Diversity and Inclusion – Culture of Respect:

Every person at Dalhousie has a right to be respected and safe. We believe inclusiveness is fundamental to education. We stand for equality. Dalhousie is strengthened in our diversity. We are a respectful and inclusive

community. We are committed to being a place where everyone feels welcome and supported, which is why our Strategic Direction prioritizes fostering a culture of diversity and inclusiveness (Strategic Priority 5.2). Additional diversity and inclusion information can be found at: <http://www.dal.ca/cultureofrespect.html>

Student Code of Conduct:

Everyone at Dalhousie is expected to treat others with dignity and respect. The Code of Student Conduct allows Dalhousie to take disciplinary action if students don't follow this community expectation. When appropriate, violations of the code can be resolved in a reasonable and informal manner - perhaps through a restorative justice process. If an informal resolution can't be reached, or would be inappropriate, procedures exist for formal dispute resolution. The full Code of Student Conduct can be found at:

https://www.dal.ca/dept/university_secretariat/policies/student-life/code-of-student-conduct.html

Fair Dealing Policy:

The Dalhousie University Fair Dealing Policy provides guidance for the limited use of copyright protected material without the risk of infringement and without having to seek the permission of copyright owners. It is intended to provide a balance between the rights of creators and the rights of users at Dalhousie. Additional information regarding the Fair Dealing Policy can be found at:

https://www.dal.ca/dept/university_secretariat/policies/academic/fair-dealing-policy-.html

Originality Checking Software:

The course instructor may use Dalhousie's approved originality checking software and Google to check the originality of any work submitted for credit, in accordance with the Student Submission of Assignments and Use of Originality Checking Software Policy. Students are free, without penalty of grade, to choose an alternative method of attesting to the authenticity of their work and must inform the instructor no later than the last day to add/drop classes of their intent to choose an alternate method. Additional information regarding Originality Checking Software can be found at:

https://www.dal.ca/dept/university_secretariat/policies/academic/student-submission-of-assignments-and-use-of-originality-checking-software-policy-.html

Student Use of Course Materials:

Course materials are designed for use as part of this course at Dalhousie University and are the property of the instructor unless otherwise stated. Third party copyrighted materials (such as books, journal articles, music, videos, etc.) have either been licensed for use in this course or fall under an exception or limitation in Canadian Copyright law. Copying this course material for distribution (e.g., uploading to a commercial third-party website) may lead to a violation of Copyright law.